

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022132**Date Inspected:** 24-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD**WELDING:****Cross Beam 17**

This QA Inspector observed ZPMC qualified welding personnel identified as 040673 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CB3001A-017-002; located On Orthotropic Box Girder (OBG) Deck Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20402. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached photo for further details.

Segment 12AE

This QA Inspector observed ZPMC qualified welding personnel identified as 067752 perform Shielded Metal Arc

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Welding (SMAW), weld joint identified as OBE12C-029; located On Orthotropic Box Girder (OBG) Edge Plate to Cantilever Bracket Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang . This QA Inspector observed the base material appears to have been preheated by a torch prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1. See attached photo for further details.

Segment 12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE12C-022; located On Orthotropic Box Girder (OBG) Edge Plate to Cantilever Bracket Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang . This QA Inspector observed the base material appears to have been preheated by a torch prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1.

NDT:

Segment 12AE

This QA Inspector performed Magnetic Particle Testing (MPT) Verification Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations Verified are as follows.

SEG3006M-134
CA3010C-062
DP3070-001-191
CA3010-015
CA3010C-037
SEG3006H-132
CA3010D-061
DP3070-001-133
FB3091-001-011
CA3010D-153
SEG3006K-131
CA3010C-262
DP3070-001-158
CA3010C-214
FB3089-001-085
CA3010C-282

Nondestructive testing (NDT) notification No.08612

DCP:

Segment 12W

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This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray Bottom Plate at Panel Point (PP) 109 and PP 117 for Segment 12W. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00630 Dated March 24, 2011.

Bolt sizes used were M20 x 55 DHGM200038 and final torque required was 280 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune,Manoj
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Quality Assurance Inspector

Reviewed By:	Peterson,Art
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QA Reviewer
